What is claimed is:

1. (Currently Amended) A thermoplastic elastomer prepared using a catalyst system ~~useful in preparing an elastomeric composition, the catalyst system~~ comprising:

at least one non-brominated phenolic resin;

at least one ~~ingredient selected from the group consisting of a~~ non-transition metal halide wherein the halide comprises magnesium chloride, calcium chloride, sodium chloride, potassium chloride, or combinations thereof ~~and a nanoclay~~;

~~optionally,~~ at least one acid selected from the group consisting of oxalic acid, citric acid, stearic acid, and combinations thereof.; and

optionally, at least one hydrogen halide scavenger~~wherein when the ingredient is nanoclay, the phenolic resin is brominated~~.

2. (Cancelled)

3. (Currently Amended) The thermoplastic elastomer of claim 1, ~~catalyst system of claim 2,~~ wherein the at least one phenolic resin comprises methylol groups.

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) A process for making ~~an elastomeric composition~~ a thermoplastic elastomer, the process comprising:

providing a catalyst system ~~of Claim 1~~;

providing at least one thermoplastic polymer or precursors for at least one thermoplastic polymer;

providing at least one uncured elastomer;

mixing components of the catalyst system, simultaneously or sequentially, with the uncured elastomer; and

heating the uncured elastomer in the presence of the catalyst system to form the thermoplastic elastomer, ~~elastomeric composition~~

wherein the catalyst system comprises at least one non-brominated phenolic resin;

at least one non-transition metal halide wherein the halide comprises magnesium chloride, calcium chloride, sodium chloride, potassium chloride, or combinations thereof;

at least one acid selected from the group consisting of oxalic acid, citric acid, stearic acid, and combinations thereof; and

optionally, at least one hydrogen halide scavenger.

10. (Currently Amended) The process of claim 9, wherein the amount of the phenolic resin used is about 2 to about 10 percent by weight based on total weight of the uncured elastomer~~;~~

~~wherein the amount of the halide used is about 2 to about 8 percent by weight based on total weight of the uncured elastomer; and~~

~~wherein the amount of the acid used is about 1 to about 5 percent by weight based on total weight of the uncured elastomer~~.

11. (Currently Amended) The process of claim 9, wherein the thermoplastic elastomer ~~elastomeric composition~~ is prepared using reactive extrusion.

12. (New) The process of Claim 9, wherein the amount of the halide used is about 2 to about 8 percent by weight based on total weight of the uncured elastomer.

13. (New) The process of Claim 9, wherein the amount of the acid used is about 1 to about 5 percent by weight based on total weight of the uncured elastomer.